

```

1  ccgcataccta gccgccgact cacacaaggc aggtgggtga ggaaatccag agttgccatg
61 gagaaaaattc cagtgtcagc attcttgctc cttgtggccc tctcctacac tctggccaga
121 gataccacag tcaaacctgg agccaaaaag gacacaaagg actctcgacc caaactgccc
181 cagaccctct ccagagggtg gggtgaccaa ctcactctgga ctcagacata tgaagaagct
241 ctatataaat ccaagacaag caacaaaccc ttgatgatta ttcactcactt ggatgagtgc
301 ccacacagtc aagcttttaa gaaagtgttt gctgaaaata aagaaatoca gaaattggca
361 gagcagtttg tctctctcaa tctgggtttat gaaacaactg acaaacacct ttctcctgat
421 ggccagtatg tcccaggat tatgtttgtt gacctatctc tgacagttag agccgatatc
481 actggaagat attcaaactg tctctatgct tacgaacctg cagatacagc tctgttgctt
541 gacaacatga agaaagctct caagttgctg aagactgaat tgtaaagaaa aaaaatctcc
601 aagcccttct gtctgtcagg ccttgagact tgaaaccaga agaagtgtga gaagactggc
661 tagtgtggaa gcatagtga cacttgattt aggttatggt ttaatgttac aacaactatt
721 ttttaagaaa aacaagtttt agaaatttgg tttcaagtgt acatgtgtga aaacaatatt
781 gtatactacc atagtgagcc atgattttct aaaaaaaaaa ataatgttt tgggggtgtt
841 ctgttttctc caacttggtc tttcacagtg gttcgtttac caaataggat taaacacaca
901 caaaatgctc aaggaaggga caagacaaaa ccaaaactag ttcaaataat gaagacaaa
961 gaccaagtta tcatctcacc acaccacagg ttctcactag atgactgtaa gtagacacga
1021 gcttaatcaa cagaagtatc aagccatgtg ctttagcata aaagaatatt tagaaaaaca
1081 tccaagaaa atcacatcac tacctagagt caactctggc caggaactct aaggtacaca
1141 ctttcattta gtaattaaat tttagtcaga ttttgcccaa cctaattgctc tcagggaaag
1201 cctctggcaa gtagctttct ccttcagagg tctaatttag tagaaaggtc atccaaagaa
1261 catctgcact cctgaacaca ccctgaagaa atcctgggaa ttgaccttgt aatcgatttg
1321 tctgtcaagg tcctaaagta ctggagtga ataaattcag ccaacatgtg actaattgga
1381 agaagagcaa aggggtgtga cgtgttgatg aggcagatgg agatcagagg ttactagggt
1441 ttaggaaacg tgaaaggctg tggcatcagg gtaggggagc attctgccta acagaaatta
1501 gaattgtgtg ttaatgtctt cactctatac ttaatctcac attcattaat atatggaatt
1561 cctctactgc ccagcccctc ctgatttctt tggcccctgg actatggtgc tgtatataat
1621 gctttgcagt atctgttgct tgtcttgatt aacttttttg gataaaacct tttttgaaca
1681 gaaaaaaaaa aaaaaaaaaa a

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FIG. 1

1 MEKIPVSAFLLLVALSYTLARDTTVKPGAKKDTKDSRPKL  
 41 PQTL SRGWGDQLIWTQTYYEALYKSKTSNKPLMIHHLDE  
 81 CPHSQALKKKVFAENKEIQKLAEQFVLLNLVYETTDKHLSP  
 121 DGQYVPRIMFVDP SLTVRADITGRYSNRLYAYEPADTALL  
 161 LDNMKKALKLLKTEL

FIG. 2

1	ggcaaccctt	gcggtcacaca	caaagcagga	gggtgggaag	cccagatttg	ccatggagaa
61	atcttcagtg	tctgcaatcc	tgcttcttgt	ggccatttct	ggtaccttgg	ccaaagacac
121	cacagtcaaa	tctggagcca	aaaaggacct	aaaggactct	cggcccaaac	tacctcagac
181	actctccaga	ggttggggcg	atcagctcat	ctggactcag	acatacgaag	aagctttata
241	cagatccaag	acaagcaaca	gacccttgat	ggtcattcat	cacttggacg	aatgcccaca
301	cagtcaagcc	ttaaagaaa	tgtttgctga	acataaagaa	atccagaaat	tggcagagca
361	gtttgttctc	ctcaacctgg	tctatgaaac	aaccgacaag	cacctttctc	ctgatggcca
421	gtacgtcccc	agaatttgt	ttgtagacct	atccctgacg	gtgagggcag	acatcactgg
481	acgatactca	aaccggctct	acgcttatga	accttctgac	acagctttgt	tgtacgacaa
541	catgaagaaa	gctctcaagc	tgctaaagac	agaattgtag	agctaactgc	gcaccgggtc
601	aggagaccag	aaggcagaag	cactgtggac	ttgcagatta	cagtacagtt	taatgttaca
661	acagatatat	tttttaaaaca	cccacaggtg	gggaaacaat	attattatct	actacagtga
721	agcatgattt	tctagaaaat	aaagtcttgt	gagaactcca	aaaaaaaaaa	aaaaaaaaaa

FIG. 3

MEKFSVSAILLLVAISGTLAKDTTVKSGAKKDPKDSRPKLPQTLSRGWGDQLIWTQTYEEALYRS  
 KTSNRPLMVIHHLDECPHSQALKKVFAEHKEIQKLAEQFVLLNLVYETTDKHLSPDGQYVPRIVF  
 VDPSLTVRADITGRYSNRLYAYEPSDTALLYDNMKKALKLLKTEL

FIG. 4

1	cggcaaccct	tgccggctcac	acaaagcagg	agggaggaga	gctcagattt	gcatgggaga
61	aattttcagt	ctcggcaatc	ctgcttcttg	tggccatctc	tggtactctg	gccaaagaca
121	ccacagtcaa	atctggatcc	aaaaaggacc	caaaggactc	tcgacccaaa	ctaccccaga
181	ccctgtccag	aggttgggga	gatcagctca	tctggactca	gacttacgaa	gaagccttat
241	acaaatccaa	gacaagcaac	agacccttga	tggtcattca	tcacttggac	gaatgcccgc
301	acagtcaagc	tttaaagaaa	gtgtttgctg	aaaataagga	gatccagaaa	ttggcagagc
361	agtttgttct	cctcaacttg	atctatgaaa	caactgacaa	gcacctttct	cctgatggcc
421	agtacgtccc	cagaattgtg	tttgtggacc	cttccctgac	ggtgagggca	gacatcacccg
481	gaagatactc	aaaccgtctc	tacgcttacg	aaccttctga	cacagctctg	ctgcacgaca
541	acatgaagaa	agctctcaag	ttgctgaaga	cagagttgta	gagtcaactg	tacagtgcct
601	caggagccgg	gaaggcagaa	gcactgtgga	cctgccgatg	acattacagt	ttaatgttac
661	aacaaatgta	ttttttaaac	acccacgtgt	ggggaaacaa	tattattatc	tactacagac
721	acatgatttt	ctagaaaata	aagtcttgtg	agaactcc		

FIG. 5

MEKFSVSAILLLVAISGTLAKDTTVKSGSKKDPKDSRPKLPQTL SRGWGDQLIWTQTYEEALYKS  
KTSNRPLMVIHHLDECPHSQALKKVFAENKEIQKLAEQFVLLNLIYETTDKHLSPDGQYVPRIVF  
VDPSLTVRADITGRYSNRLYAYEPSDTALLHDNMKKALKLLKTEL

**FIG. 6**

1 AACCCTAGTT ACCTCACACC AAGACAGATA TGCCAAAGAT TCCACAGCCT  
51 CAATAGCATG TGTAGGATAT CTGCTAATAA TTACCTCCTC CTTGCCATCC  
101 GTCAGCCACT ATGACAAACT CTGGGTTTTT CCTGACATGA GATTAGGCAC  
151 ATGAGTATAG AATAATTATA TCACTATAAT TAACTGTAAC AAATCAAAGA  
201 CTTTTTTTTT TAAGTTCCGG AGTATGTGTG TAGGATGTGC AGGTTTGTTC  
251 CATCAGTAAA CGTGTGCCAT GGTGGTTTGC TGCACTGATC AACCCAACAA  
301 CTAGGTCTTA AGCCAGCCTG CATTAGCTAC TTTTATCAAA TGTATGGGC  
351 TGAATTGTGT CCCCCCAA AATTCATATG TTGAAGTCTT AATCCCCAGG  
401 ACTTCAGAAT AGGATCTTTA CAGAGGTAAT TAAGTTAAAG TAGGTCATTA  
451 GGCAGGACCC AAATACAATA TGA CTGGTGT CCTTATAAGA AAAGGAAAAA  
501 AATGACACAG ACAGGTACAG AGGGAAAAAC CATGTGGCAA TACAGGGAAA  
551 AGTCATTTAA TATTCAAAT GGTCCCATAT GTTAATATTA TCCCATATT  
601 ATAGATGGAG AAAGTGAAGT TTTGGGGATG TTAAATGAGA TCTCAGATCA  
651 TCCTATGAGC AAGCACCAGG ATGCAGGATT CAGATGGGAA TCTCGTGA CT  
701 CCAAATCCCA TCCACTTGTT ACTTTCAGTG GATAAGGGAC TGAAGGACTT  
751 TGGTCCCAAC TCTGCCCTAA ACTAGTTGTG AGACCTTCAA AAAGTTATGA  
801 ATTTTTTGCC ATCTTCATTT ATTCATCTGT AAAATGAAAG ACTGGAATTG  
851 AATATTACAA GGGTCTATCT AAGGGCCTGC TAGTTTTAAG AATTTTGCTC  
901 AAATCATCGT TTTCAAAC TC GAAGAAAT TACTTCTATA AATTCATTAG  
951 AATTGAAAGG AAATTCAGTA TTTGGAGAAT CACGATTTTG CCACAGAAT  
1001 TCAAGGATTT ATTGGAAAAA TATACATACT TGCAAATGTT TTTGAAATAT  
1051 TATGACCTTA ACTCATTTTA AAAAGTCATT TATATAGGGC TTGCATCCCA  
1101 TTCATTAACT TTCTGTTGTT AACATTTTCT TCATTCTGAG CTTTTAAAGA  
1151 CTGCACACAA CTTTCATGAAC AAAATACAGG ATTAAAATTT TCTGACAGAA  
1201 AATTTAAATT CCAGTTTTTA AATCTTCAGG GAGTAATTAA ATGGTCTTGA  
1251 GGGGAAAAAA AACTTGGTTG CAGACCTTAG TTTT TAGGTC TGAGAAAATG

1301 GAGTAAATGG CTCCTGCTT GCGTGGCAGG AAAGTTTGCC TTAAATAAG  
1351 AGATTATCTG TGAAATACCT TTGAACTCTG TGGAGGGAAG TTGCTGCATA  
1401 CATTCAATGG CAAGGCATTT ATTACAAGCT CACGATATTA GGCTGTTTTT  
1451 TTTTTTTTTT TTGCCAATAC TTCCTCAGTT TTGAAAAATT ACGTGGGTTA  
1501 CTTGATTTGT ATTTTTTTTC ATACCTGTAG AAGTTAGGGT GCATTGTTTT  
1551 GACAGGAGCA GGGAAGTATT GTAGAAAATA ATTTTATCA TAATGGAGTA  
1601 TGGCAGGTTA TATGACTGCG AGGATCAGAA TTGTGAATCA TCTCTTGTGT  
1651 GTCTTCAAGT AAATAAAGGC AATCTGCCCA CGGAGCAGAA AAAAAATCTA  
1701 CAAACTACAA ACTCTGTCCA ATCATGTAAA GACAAATCAG CCTTCAGGCA  
1751 AATCAAATGT CTCATTCAA AGTCTACCTG GATTTGGCAC TCTGCCCATC  
1801 GTTTCAAAAC CTCTTAACAA TACGTTTCAC AAATAGTTAA AAACATGCAT  
1851 ACTGAAAAGC ATACTTTTGC AATGTTATTT TTAAAAACAA GGAACCTCTT  
1901 AACCCAGGGA AGATAATCAC TTGGGGAAAG GAAGGTTTCGT TTCTGAGTTA  
1951 GCAACAAGTA AATGCAGCAC TGGTGGGTGG GATTGAGGTG TGCCCTGGTG  
2001 CATAAATAGA GACTCAGCTG TGCTGGCACA CTCAGAAGCT TGGACCGCAT

**FIG. 7**

1 AAAGGTCTAG AAAGAAACCT TTAAATGAG TGAACCTTAC CATACTAGA  
51 AATGCTGTGG GCTAGTGACT CTTGAAATAA CTCATTGTC TTATGCTTCT  
101 AAAAGGTCTA CAGAGACCAT TTTTTTAAAA GATGATTGAT TAAAAAAAAC  
151 TGATTTGAGG TAAAAACCTT AACTAGAATT GCTCTCACAT ATCTAAATAT  
201 CACTATTTAG CCTTTAGTTC TATTCAAACC ATTATTTTAC AGATTAGAAA  
251 CACCAAACAA ACGATTAAGC AAACAAAAAT AGAACAGTCA ATAGTTTTCT  
301 AAAGGCCCTA CAATTAGTTG AGGGCAGAGC TAGGAGGAAA GCCAGGGCTC  
351 TTCTACTCCA CTATCTTAGG CATTGGGAAA TGGGTGGGAT TTCGGGTCAA  
401 TTACAGTCAG CATCCTGCTT CCACACTCTG GATGATGATA TCAGAGGTGA  
451 CACTGAACAC CCTGAAACTT TAGTTTCCAC GCCTGTAACA GAGTTCCATG  
501 CAACAGTTCA GAGCGACATA GTCGTGAACA TAGAGTGAAC TGAGGAAGAG  
551 GAAGAGGCTT GGGATGAACG TAGGGTCCCT GCTTCCACAG GAACAGGACA  
601 GCCTGGGAGG CTGAAGCATC GCGATTAC CTTGCTCAA TCCTGGAGGC  
651 TCCACACAGA CCATTGATGT GTCAGCAGCG TTAGGTTCTT CTCTTCTTGG  
701 CCTGTAGATG AAGTCATTAT GTGCCTGTGT CTCTGACCTA AGTTTCTTTC  
751 CTATGAGAAT AACAGTCATA TTAGATTAGA ACCCAGTCTA ATGACCTATT  
801 TCACTTACTT TAAATTTCTT ATTCATTTAT TTCAATTACT TTCATTTTAT  
851 TTACTIONT TGGTACTTAG AATCAAATTC AGAGCCTTGC ACATACTTAA  
901 CAAATGCTTA ATCTCTCTTT AAGACCCTCT CTCTGTGTAT GATCATCTGA  
951 TGAGGTCCTG GGAATTACAG CACATGGATT CCTTTAAAC ACATCTCAAC  
1001 CATACTCTT GGTAATTAAA AACATCTCTA ATTTGCTGTA ATTCACTATA  
1051 ATGATATAAC AGCTATCCTG GAGTATTCCT GTGTCTAATT TCATGCTGGT  
1101 AAAGCTCTGG TTATGGTACA ACAAAGATGA GGTAATTATT ACAACATCCT  
1151 GCACATACTG GGGTATCTGT GGCATCCTTG GTACATCAGT CTTGAAACGA  
1201 AGCCAATATC TACAGTAGCT TTGAGATGCG TAGGCGAGGG TAATTCTTTT  
1251 ATGCTACTGA GGTGGTACTG TGTGGTCATT CTTTGTGATC TCCTGATGTT  
1301 GCGATGCACA CCCACAAACA CACATTTGTA CACATATATT ATCATCAGG

1351 GCCATTATTA GCTCACAACA TTATCCTATC CTTCTTTTCT TCAATAACCT  
1401 CTCCGAGTTT GAAGAGTCCA TGGCGATGAT TTGCGGGGTT TATACCTGTG  
1451 ATTAAAGCGC ACACAAAAAA TGATATTGTG GAAAATAACA TGTCTTGTGA  
1501 TCGAGCATGG CCAGCTGTAT AACTGTAAGA AGGATTAGAA CTGTGAATCA  
1551 TCCTTAAGAA AAAAAAAAAA AAAAAAAAAAG CTAAATAAAT GCAATCTGCC  
1601 CAAGAGGGAG GAAATGAATA CCTATAAACC ACAACTTCTA TCCAATCACA  
1651 TACAGACAAA TCAGCCTTCA GACCAATCAA ACGTCTTCAT TTAAAGCTTA  
1701 CCTGGACTTG GCATACTGCC CAGCTTTTCC AAAACTACTC ACAATAATAC  
1751 CTTCAACAAC AGTTAAAAAA CGCTGGTACT CAAACAAAAT CAACAGCCTT  
1801 TTCAACGACT GCTTTAAAAA AGACCAAACA AACAAACAAG GAACGTCTTA  
1851 ACCCAGAGAA GACAATTGCT TGGGAGAGGA AAAGTTTGCT TCTGAGTTAG  
1901 CAGCCTGTGG AAACAGGATT AGTGGGTGGG ATTGGGGTGT GCTCTGCCCCA  
1951 TAAATACAGG CTCAGCGCTG CGCTGGCACA CTGAGAAACT TGGACGGCAA  
2001 CCCTTGCGGC TCACACAAAG CAGGAGGGTG GGAAGCCCAG GTAAGGCAAT

**FIG. 8**